

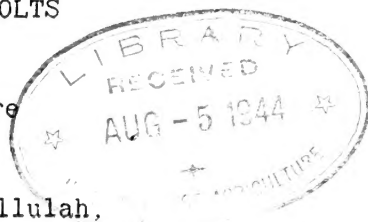
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

March 1934

MARKING INSECTS WITH ALUMINUM PAINT TO DETERMINE MOLTS

By P. A. Woke, Division of Cotton Insects,
Bureau of Entomology, U. S. Department of Agriculture



In studying the biology of the field cricket at Tullulah, La., it was very difficult to determine when the nymphs had molted. The writer devised a method of marking the pronotum with aluminum paint that was entirely satisfactory for crickets and may be useful for other insects. The aluminum paint was mixed with amyl acetate to the proper consistency and applied with the point of a needle to the pronotum of the nymph. For very small nymphs a fine needle was used and the marking was done under a binocular. Larger nymphs were marked with a larger needle under a dissecting microscope. Only a minute spot of paint is necessary to make it easy to tell at a glance if the insect has molted. To render the nymphs inactive, they were placed in a shell vial on cracked ice for a few minutes. They quickly revived from the effect of the chilling, as the temperature was not excessively low and the exposure was short. There were no indications that this process of marking affected the activity or the normal development of the nymphs.

